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An Exploration of Stress, Job Satisfaction, Individual Teacher and School Factors Among Teach For America Teachers

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An Exploration of Stress, Job Satisfaction, Individual Teacher and School Factors Among Teach For America Teachers

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Abstract

An Exploration of Stress, Job Satisfaction, Individual Teacher and School Factors Among Teach For America Teachers

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Current research suggests that the attrition rate for novice teachers continues to rise and that chronic stress plays a significant role (Ingersoll, 2001; Klassen & Chiu, 2011). While stress in educational settings is widely acknowledged, specific factors contributing to teacher stress are not well understood (McCarthy, Lambert, O'Donnell, & Melendres, 2009). To address this gap in the literature, data were collected from 51 novice teachers (Teach For America corps members and alumni; mean years' teaching experience = 2.04) to explore vulnerability to stress, job satisfaction, preventive coping resources, perfectionism, and school context (charter vs. district). Results demonstrated that this sample of teachers reported higher than average demands and stress levels, and lower than average levels of classroom resources. Data also suggested higher levels of preventive coping were related to lower perceptions of classroom demands and lower perfectionism scores. Additionally, higher levels of perfectionism were related to lower perceptions of classroom resources. Participants were classified into groups (Resource,

Demand, & Balance) based on scores on perceptions of classroom demands and resources. Membership in the Demand group exceeded average numbers found in previous studies. Preventive coping did not differ significantly between members of the Demand group and non-members of the Demand group, though the Demand group had significantly higher perfectionism and significantly lower job satisfaction scores. Finally, while differences in perceived demands were not significantly different by school context, teachers at charter schools showed significantly higher perceived resources. These findings highlight the need to provide a more complex understanding of factors placing novice teachers at risk for occupational stress and could inform decisions on how best to support them.

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INTRODUCTION

Teachers are the most important school-level factor in students' learning (McCaffrey, Koretz, Lockwood, & Hamilton, 2004; Rivkin, Hanushek, & Kain, 2005). Teaching is an inherently demanding profession, and while educator stress has been investigated for many years (Bibou-Nakou, Stogiannidou, & Kiosseoglou, 1999; Brouwers & Tomic, 2000; Eskridge & Coker, 1985; Freidman, 2006; Sutton, Mudrey-Camino, & Knight, 2009), recent changes in education policy and increased school accountability have added much to the plate of the American public school teacher. There is evidence that teacher job satisfaction is falling (Metlife Survey of The American Teacher, 2012), and novice teachers have been leaving the profession in droves with almost a third quitting the profession within the first three years of service (National Commission on Teaching and America's Future, 2009; Ingersoll, 2012).

Research by Ingersoll (2001) suggests that teacher attrition is less a result of a teacher shortage or teacher retirement and more a result of teacher dissatisfaction and the pursuit of other employment. While national data indicate that in the past twenty years the number of beginning teachers has rapidly increased, research indicates that within the first five years of teaching, the attrition rate is between 40% and 50% (Ingersoll, 2012). The profession cannot expect to remain efficacious if composed of predominantly new entrants unlikely to stay in the classroom beyond a few years. Understanding the factors associated with novice teachers' vulnerability to stress and job dissatisfaction could profoundly affect teacher retention and education reform at large, especially in our highest needs schools. Consequently, this study aims to explore individual and school-level factors that influence novice teachers' vulnerability to stress and job satisfaction.

TEACHER STRESS

Chronic stress has been identified as a culprit in the "revolving door" of teachers entering, then leaving, the profession for reasons other than retirement (Ingersoll, 2001; Klassen & Chiu, 2011). Kyriacou and Sutcliffe (1977), pioneers in the field, define teacher stress as a state of negative affect experienced by a teacher as a result of negative perceptions of the classroom or school environment. Chronic stress can lead to teacher burnout, defined as a loss of idealism and enthusiasm for work (Freudenberger, 1974) which consists of emotional exhaustion, lessening of feelings of personal accomplishment, and distancing oneself emotionally from others (Maslach, Schaufeli, & Leiter, 2001). Moreover, a study by O'Donnell, Lambert, and McCarthy (2008) suggests that variability in burnout is a function of teacher perception, rather than the building in which they work.

Transactional theories (Lazarus & Folkman, 1984) also emphasize the perceptual nature of stress, predicting that individuals experience stress when they perceive themselves as unable to cope with the demands they face. Recent research links teachers' appraisals of their work environment to the experience of stress (Chang & Davis, 2009; Kokkinos, Panayiotou, & Davazoglou, 2005; McCarthy, Lambert, O'Donnell, & Melendres, 2009; McCarthy, Lambert, Crowe, & McCarthy, 2010; McCarthy, Hart, Crowe, McCarthy, Guzman, Lambert, & Reiser, 2012), suggesting that teachers are most vulnerable to stress when they perceive their professional demands as exceeding their ability to cope (Chang, 2009; Steinhardt, Jaggars, Faulk, & Gloria, 2011). Such an imbalance can lead to stress, job dissatisfaction, emotional exhaustion, and burnout (Klassen & Chiu, 2011; López, Castro, Santiago, & Villardefrancos, 2010).

Much of the existing research on teacher stress identifies external professional factors that place teachers at risk for stress; for example, financial concerns, working in

low-performing schools, and lack of support by colleagues and administration (Ingersoll, 2012; Lambert, McCarthy, Crowe, McCarthy, & Fisher, 2012). While these external realities are critical to take into account, according to the transactional model of stress, high demand levels become stressful only when appraised as exceeding resources for coping (Lazarus & Folkman, 1984; Lambert McCarthy, O'Donnell, & Melendres, 2007; McCarthy et al., 2009, 2010, 2012; Lambert et al., 2012). As such, this model suggests that we must understand how individual teachers appraise both resources and demands in their schools and classrooms, to fully explore their vulnerability to stress in a given school year.

OPERATIONALIZING TRANSACTIONAL MODELS OF TEACHER STRESS USING THE CARD

To address the need for this research, Lambert, McCarthy, O'Donnell and Wang (2009) developed the *Classroom Appraisal of Resources & Demands* (CARD) to measure teacher perceptions of their classroom demands and resources and to assess teachers' risk of experiencing stress at work. To test the transactional model of stress, teachers are classified into three groups based on their responses to the CARD: (1) those perceiving classroom resources as greater than demands (labeled Resourced group), (2) those perceiving classroom resources as relatively equal to demands (labeled Balanced group), and (3) those perceiving classroom demands as exceeding their resources (labeled Demand group). According to transactional models of stress, it is this last group that is theorized to be most vulnerable to stress.

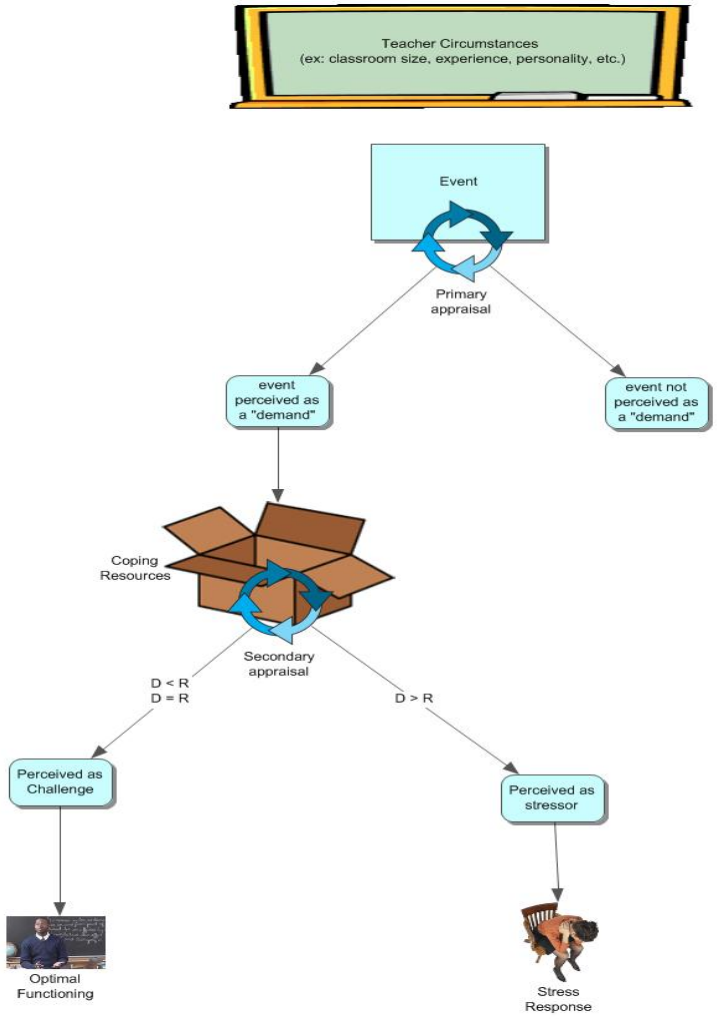

Figure 1: Transactional Model of Teacher Stress (McCarthy, Lineback, & Reiser, 2014)

STRUCTURAL & CLASSROOM FACTORS

Recent studies using the CARD suggest that teachers who perceive themselves as having higher classroom demands compared to resources report more burnout symptoms, more students with behavior problems, learning disabilities, and poor attendance (Kusherman, O'Donnell, & McCarthy, 2006; Lambert et al., 2007 & 2012; McCarthy et al., 2009). Likewise, teachers reporting an intention to leave their current job for professional rather than personal reasons also report higher demands in the classroom,

fewer resources provided by schools, and higher levels of occupational stress (Jazaar, Lambert, and O'Donnell, 2007; McCarthy et al., 2010). Additionally, Lambert et al. (2012) found that teachers classified as "resourced" reported smaller numbers of students in their classrooms.

TEACHER EXPERIENCES & CHARACTERISTICS

Additionally, findings from a study by that used the CARD supported transactional models in that individual perceptions seemed most determinative of stress, as opposed to external factors alone (O'Donnell et al., 2008). For example, a recent study by McCarthy, et al. (in press) found that Teachers classified as Resourced had more experience overall and more tenure at their current school than teachers classified in Demand group. Furthermore, in a recent study investigating teacher coping and burnout, researchers found that teachers classified in the Demand group reported higher levels of stress related to diversity issues with parents, teachers, and administrators than the other teachers (McCarthy et al., 2012).

Given previous research showing the CARD as a promising way to operationalize transactional models and understand teacher stress, an important question arising from prior samples of teachers is whether similar results can be found in a sample of novice teachers.

JOB SATISFACTION

Teacher job satisfaction and attrition are growing concerns. The 2012 Met Life Survey of The American Teacher (2012) found that, "Teacher satisfaction has declined to its lowest point in 25 years," (p. 45), with a mere 39% reporting themselves as very satisfied. Ingersoll (2012) noted that in 1987 the most common teacher in the workforce had 15 years of experience, while in 2008 the most common teacher was a first year

beginner. Despite the increasing attention to teacher recruitment and the popularity of alternative certification programs like Teach For America, Ingersoll's research suggests that the declining age of the most common teacher is primarily due to teacher dissatisfaction and the pursuit of other employment.

Previous research suggests that teacher job satisfaction may be due to the felt experience of a given teacher. For example, a study by Winter and colleagues (2006) indicated that teacher autonomy along with meaningfulness, responsibility, and knowledge of results from their work, accounted for a significant amount of the variance in job satisfaction. Similarly, Johnson and colleagues (2012) found that teachers with a positive sense of control tended to have a high level of satisfaction, were more likely to stay in their current position, all of which have been associated with higher student achievement.

Likewise, a teacher's perceptions of the ratio of demands to resources have been associated repeatedly with job satisfaction. CARD group classifications have been associated with vocational concerns in several studies (Jazaar et al., 2007; McCarthy et al., 2010; Lambert et al., 2012; McCarthy et al., 2012), which examined both satisfaction and teacher reported intentions to change jobs or leave the field. Across a number of studies, being in the Demand group was associated with lower levels of job satisfaction and a greater intention to leave their jobs (McCarthy et al., 2010; Lambert et al., 2012; McCarthy et al., 2012; McCarthy, Lambert, & Reiser, in press). Likewise, resourced teachers had higher levels of job satisfaction than either Demand or Balanced teachers (Lambert et al., 2012). At a time in which teacher burnout and turnover is high, identification and attention to such teachers using transactional models of stress could deepen our understanding of the drop in job satisfaction and ultimately the decision to leave or remain in the teaching profession.

INDIVIDUAL TEACHER FACTORS

Research focused upon individual teacher factors could lead to a better understanding of teacher stress in perceptual models. While organizational and systemic factors affecting teacher well-being have received attention in research, much less is known about the role of psychological factors affecting teacher well-being (Klassen & Chiu, 2011). Previous studies have focused on teachers' workplace conditions (Zellars, Hochwarter, & Perrewé, 2004); student performance on standardized tests and number of disciplinary incidents; (Feng, 2005), rather than on teachers themselves (Wilhelm, Dewhurst-Savellis, & Parker, 2000).

While these external realities are clearly important to teachers' occupational well-being, previous research with the CARD has indicated that most of the variability in teacher stress and burnout is at the individual teacher level and not the building level, even within the same school (McCarthy et al., 2009; Ullrich, Lambert, & McCarthy, 2012). For example, symptoms of depersonalization and emotional exhaustion were positively related to the classroom demand score given by the CARD (McCarthy et al., 2009). Additional research on individual teacher factors such as perfectionism and preventive coping could lead to a deeper understanding of the driving forces behind a teacher's unique perceptions of demands and resources especially among novice teachers.

PREVENTIVE COPING RESOURCES

Access to coping resources is hypothesized to be an important element in the stress process, in general (Hobfoll et al., 1998) and with teachers (Friedman, 2006). Coping resources refer to various assets in an individual's repertoire for dealing with life demands (Matheny, Curlette, Aycock, & Junker, 1993). For example, research suggests that teacher self-efficacy, expectations of competence and control in carrying out life

tasks (Bandura, 1982), and relationships with colleagues and administrators might all be considered important types of coping resources for educators (Klassen & Chiu, 2011).

Preventive coping resources are a type of coping resource useful in off-setting and minimizing stress and have been associated with teacher well being in previous research (McCarthy et al., 2009). McCarthy, Kissen, Yadley, Wood, and Lambert (2006) found that elementary teachers reporting more burnout symptoms also reported having lower levels of personal resources for stress prevention. Likewise, McCarthy and colleagues (2010) found that high school teachers with higher levels of resources for stress prevention reported less classroom stress and higher job satisfaction.

To assess coping resources relevant to teacher vulnerability to stress, prior studies using the CARD have examined whether teachers classified in the Demand, Balanced, and Resourced groups differed in their self-reported preventive coping resources (McCarthy et al, 2009; McCarthy et al., 2010; Lambert, 2012; McCarthy et al., 2012; Ullrich et al., 2012; McCarthy et al., in press). Teacher preventive coping resources were negatively associated with stress scores (perceiving demands as outweighing resources) from the CARD (McCarthy et al., 2010; McCarthy et al., in press).

PERFECTIONISM

Perfectionism is a multidimensional construct composed of both positive and negative dimensions (Slaney, Rice, Mobley, Trippi, & Ashby, 2001). In its maladaptive form, perfectionism can drive people to strive for unattainable goals, while in its adaptive form it can motivate individuals to reach their goals. One study found that maladaptive perfectionists had lower satisfaction with life and higher stress and depression scores compared with adaptive perfectionists (Ashby et. al, 2012). A central tenet of perfectionism is a person's possession of and adherence to high personal standards, and

its defining negative characteristic is the distress resulting from discrepancies between these personal standards and actual performance (Slanety et al., 2001).

There is a gap in the literature investigating perfectionism in teachers, not to mention its potential connection to teacher stress. While perfectionism has the potential to be maladaptive in an individual; interestingly, a recent study found that perfectionism was ranked first among four teacher personality factors predictive of principals' effectiveness ratings (Watts, Cage, Batley, & Davis, 2011). In a study analyzing the nature and importance of teacher guilt, Hargreaves and Tucker (1991) discussed the "personal of perfectionism" as one of four guilt traps common to teaching.

Common attributes of perfectionists include high standards, procrastination, self-criticism, and a tendency to measure self-worth by productivity and accomplishment (Ashby et. al, 2012). This issue is particularly salient in certain teacher-recruitment programs emphasizing extremely high achievements and standards. Specifically, Teach For America recruits and selects corps members with a record of high achievement (academic or professional), strong organizational skills, leadership, and a history of persevering in the face of challenges. As such, it is hypothesized that Teach For America corps members and recent alumni will yield high scores on measures of perfectionism. Investigating the relationship between perfectionism and perceptions of resources and demands in such organizational structures could impact teacher recruitment and training as well as increase job satisfaction and retention in the field.

SCHOOL CONTEXT, JOB SATISFACTION, & VULNERABILITY TO STRESS

While exploring individual teacher factors is critical to understanding vulnerability to stress and job satisfaction, very little research has explored the relationship between these outcomes and the type of school in which a teacher works.

Unsurprisingly, teachers are more satisfied and plan to stay longer in schools that have a positive work context. Working conditions predict teachers' job satisfaction, professional commitment, and teacher turnover (Johnson, Kraft, & Papay, 2012), even among novice teachers (Croco & Costigan, 2007). While research found that teachers choose to leave schools with poor work environments which are most common in schools with a majority of minority and low-income students (Ladd, 2009, 2011; Loeb, Darling-Hammond, & Luczak, 2005), such schools that provide the conditions and supports teachers need to succeed are more likely to attract and retain their teachers (Chenoweth, 2007, 2009; Ferguson, Hackman, Hanna, & Ballantine, 2010). A school's culture, the principal's leadership, and relationships among colleagues are primary predictors of teachers' job satisfaction and career plans, and a supportive context in contributes to improved student achievement (Johnson, Kraft, & Papay, 2012). Lam and Yan (2011) found that school factors, such as volume of non-teaching workload, equitability in the distribution of work, and professional autonomy, are found to influence the job satisfaction and teaching motivation of teachers significantly. However, Lambert et al. (2007) used the CARD to survey 276 teachers and found no significant appraisal group differences between Title I, private, charter, and other public schools. These findings indicate that further research should be conducted on both internal and external factors that may play a role in teacher stress.

CHARTER SCHOOLS & TEACHER AUTONOMY

Teachers in charter schools, which are public schools allowed to operate independent of district mandates, have organizational freedoms afforded by the absence of teacher unions. Because charter schools are publically funded but privately run, administrators are at liberty to make school-wide decisions such as curriculum choice,

teacher salary, and extended school hours. Research by Corwin and colleagues (1995) found high-autonomy schools more often reported greater freedom and less cooperative relationships with unions, fewer purchasing restrictions and more money for instruction, more parent participation, and more at-risk students. Additionally, compared to their counterparts in district schools, charter-school teachers reported that they had more school and classroom influence but heavier workloads (Corwin et al., 1995.) Moreover, using a national dataset from the 1999-2000 School and Staffing Survey (SASS), Renzulli, Parrot, & Beattie (2011) found that teachers in charter schools are more satisfied than are public school teachers because of greater autonomy.

Does increased autonomy coupled with heavier workloads make a charter school teacher more vulnerable to stress than a teacher bound to district mandates? To date, there is limited research examining transactional models of stress comparing teachers in charter and district schools. As the charter school movement gains steam across the nation (Santos, 2014), research on school type as an external factor could shine a critical light on a teacher vulnerability to stress, job satisfaction and retention.

CURRENT RESEARCH STUDY

STATEMENT OF PROBLEM & PURPOSE

This review of the literature indicates that research should take into account both within-group and between group differences in teachers to better understand their vulnerability to stress and overall job satisfaction. Research focusing on individual factors could lead to more information on what causes perceptions that demands outweigh resources. Likewise, research on the additional factor, school type (charter and district), could shine a light on what causes perceptions that demands outweigh resources. This could inform policy and/or school building-level changes that may increase teacher retention and ultimately benefit students.

Specifically, preventive coping resources, perfectionism, and placement at charter versus district schools may be related to teacher stress and job satisfaction outcomes. Little is known about the specific relationships between these external and internal teacher factors and how they relate to one other. In particular, research on the relationship between teachers' individual factors and their perceptions of classroom demands and resources is lacking. However, a review of the literature suggests that plentiful preventive coping resources may be at odds with a tendency to perceive that classroom demands outweigh resources, but analogous to higher job satisfaction. Additionally, previous research suggests that school type may influence teacher job satisfaction, though it remains to be seen whether school type is related to vulnerability to stress.

Broadly, the purpose of the current study was to explore relationships and differences between individual teacher factors (preventive coping resources and perfectionism), school context (district and charter schools), job satisfaction, and vulnerability to stress among novice teachers. Specifically, this study examined the

relationships between teachers' preventive coping, perfectionism, perceptions of classroom demands and resources, and job satisfaction. Additionally, this research utilized methods from prior research investigating stress among teachers by replicating a three-group classification system to compare groups on measures of job satisfaction, perfectionism, and preventive coping. Finally, this study sought to explore group differences in perceptions of classroom demands and resources, job satisfaction, perfectionism, and preventive coping between teachers placed at charter or district schools.

By considering these objectives, this study addressed the void in the literature regarding critical internal and external factors contributing to teacher stress and job satisfaction. This study extended prior research by McCarthy and colleagues by (1) comparing teachers in charter and district schools, (2) sampling from a novice teacher population (Teach For America Corps Members and recent alumni) teaching in exclusively low-income neighborhoods, and (3) adding perfectionism as an individual teacher factor. Results from this study could inform decisions on how best to support novice teachers in similar settings who share individual characteristics.

RESEARCH OBJECTIVES & HYPOTHESES

The current study was designed to accomplish four objectives: (1) to explore means on all variables for a sample of novice teachers, (2) to investigate relationships between perceived resources and demands, preventive coping, perfectionism, and job satisfaction; (3) to replicate the three-group classification system found in previous research and to investigate whether teachers classified in the three Appraisal groups differed on measures of preventive coping, perfectionism, and job satisfaction, and (4) to

investigate differences between charter school and district school teachers on measures of perceived resources and demands, preventive coping, perfectionism, and job satisfaction.

Research Objective 1: To explore means on all variables for Teach For America teachers.

Research Objective 2: To investigate relationships between perceived resources and demands, preventive coping, perfectionism, and job satisfaction.

Hypothesis 2a: Demand score will be negatively correlated with preventive coping.

Hypothesis 2b: Perfectionism will be negatively correlated with preventive coping and low resource scores, but positively correlated with higher demand scores.

Research Objective 3: To replicate the three-group classification system found in previous research and to investigate whether teachers classified in the three Appraisal groups (Resourced, Balanced, and Demand) differed on the following variables: preventive coping, perfectionism, and job satisfaction.

Hypothesis 3a: Membership in the Demand group will exceed the membership numbers in either the Balanced or Resourced groups.

Hypothesis 3b: Preventive coping scores and job satisfaction scores will be significantly higher for teachers in the Resourced group when compared with teachers in the Demand group.

Hypothesis 3c: Perfectionism scores will be significantly higher for teachers in the Demand group when compared with teachers in the Resourced and Balanced groups.

Research Objective 4: To investigate differences between charter school and district school teachers on measures of perceived resources and demands, preventive coping, and job satisfaction.

Hypothesis 4a: Perceived resources scores will be significantly higher for teachers at charter schools when compared with teachers at district schools.

Hypothesis 4b: Teachers at district schools will have significantly higher demand scores.

METHODS

PARTICIPANTS

Teach For America corps members (CMs) are full-salaried first and second-year teachers who commit to teaching for at least two years in low-income communities in urban and rural regions across the United States. Upon acceptance into the program, CMs are assigned a region and a teaching placement (ex: elementary special education). Interviews with school administrators are arranged for CMs during the summer, and they must accept the first job they are offered, regardless of grade level or charter/district preferences. CMs become "alumni" after the completion of their two-year commitment, and the organization estimates that 61% of corps members stay for a third year, while nearly a full third of alumni remain in teaching (http://www.teachforamerica.org/our-organization/faq). TFA alumni participants in this study are all current classroom teachers who have continued to teach beyond their two-year commitments, though they may or may not remain at their original placement school.

The total number of participants who began the study was 62; however, only 50 participants completed one full measure past the demographic questionnaire. For the following variables, the number completing was as follows: preventive coping (N=50), perceived demands (N=47), perceived resources (N=43), job satisfaction (N=39), perfectionism (N=38).

Based on the number of participants who completed at least one full measure in the study, the following demographic information was obtained. Participant ages ranged from 21 to 32, though the mean age was 24.4 years. Seventy-six percent of respondents identified as female, and 24% identified as male. Seventy percent of the sample identified as Caucasian/White, 10% as Asian American, 8% as African-American/Black, 8% as Hispanic-American/Latino/Chicano, 2% Other, and 2% as Multiracial. All participants

had at least a four-year college degree. Fifty-nine percent of participants were CMs in their first year; 41% of participants were CMs in their second and final year of their TFA commitment; and 27% of participants were TFA alumni. Teachers in this sample had a mean of 2.04 years' teaching experience. Seventy-two percent of participants were in their first or second year of teaching, while 28% of participants had between 3-5 years' total teaching experience. Participants had between half a year and three years' experience at their current school. Two percent of participants taught or had experience teaching pre-kindergarten, 31% taught or had experience teaching elementary, 35% taught or had experience teaching middle school, and 31% taught or had experience teaching high school. Fifty-three percent of participants taught in public charter schools, while 47% taught in public district schools.

PROCEDURE

Approval by Human Subjects Committee. The study was conducted in compliance with the ethical standards and issues outlined by the American Psychological Association and the University of Texas at Austin. The researcher obtained prior approval from the Institutional Review Board at the University of Texas at Austin before the study began.

Approval by Teach For America. The researcher obtained prior approval from Teach For America before the study began (see Appendix). Once permission was granted, the researcher conferenced with TFA personnel to discuss the study, responsibilities, and requirements.

Recruitment of Participants. Corps members and alumni participants were recruited from the New York, Jacksonville, Charlotte, and Greater Oklahoma TFA regions. As a former TFA staff member, the researcher used professional connections to recruit corps member and alumni participants via email, weekly TFA e-Newsletters, and

via CMs' TFA staff support personnel. Additionally, as a former adjunct instructor at RELAY Graduate School of Education for the 2011-2012 academic year, the researcher made announcements about the study during three lectures in the spring of 2012.

Data Collection Procedure. The instruments for this study were housed on a secure survey website (Qualtrics) and included measures of demographics, classroom demands and resources, job satisfaction, preventive coping, and perfectionism (see Appendices). Participants read and electronically consented to taking the surveys. Data was collected confidentially and identifying information was not linked to subjects' survey responses. This study received IRB approval, and the types of questions asked on the survey did not require written consent outside of a research setting. Participation was optional, and participants read and electronically consented to taking these surveys. There was no incentive for participation. Participants spent 20-25 minutes filling out the online survey at their leisure between April 21st, 2012 and June 20th, 2013. Data was collected confidentially and identifying information was not linked to a participant's survey responses.

MEASURES

Demographic Questionnaire. The demographic questionnaire included questions related to both personal (e.g. race, ethnicity, age, location, educational background, etc.) and professional information (e.g. years in the profession, grade level taught, school context, number of individual students, special or general education, etc.) A copy of the demographic survey appears in Appendix A.

Classroom Appraisal of Resources and Demands (CARD; Lambert et al.,2009). The CARD was developed to assess teachers' vulnerability to stress by examining perceptions of a teacher's demands and resources. In 2011, the investigator updated the

CARD to better reflect specific demands and resources facing today's typical teacher in public schools, as well as adding four open-ended questions to allow for qualitative analysis of classroom demands and resources.

The CARD is divided into two primary sections: Demands and Resources. The revised CARD-Demands scale consists of 49 items consisting of ratings of the severity of demands associated with various aspects of the classroom environment using a five point Likert scale that ranges from 1, "Not Demanding", to 5, "Extremely Demanding." Items on this scale ask teachers to assess several categories of demands: student demands (sample items: disruptive children, students with poor attendance), administrative demands (sample item: meetings you are required to attend), and instructional resources (sample item: availability of instructional supplies).

The CARD-Resources scale contains 34 items consisting of ratings of the helpfulness of various school-provided resources using a five point Likert scale that ranged from 1, "Very Unhelpful," to 5, "Very Helpful." Items on this scale ask teachers to assess various categories of resources: school support personnel (sample item: administrators at your school), other adults in the classroom (sample item: paraprofessionals), instructional support (sample item: instructional materials), and specialized resources (sample item: materials for children performing below grade level).

The CARD assigns participants a "Demand" score and a "Resource" score. The transactional models of stress and coping as previously described predict that teachers who yield higher demand scores are at risk for experiencing occupational stress. The CARD has been used in a number of studies, each of which has demonstrated sample-specific reliability evidence for the Demands and Resources scale (Lambert et al., 2006; McCarthy et al., 2009; McCarthy et al., 2010). These studies have also shown validity evidence for the CARD. Research using the CARD has consistently demonstrated, using

samples of teachers across various states and regions, that teacher evaluation of classroom demands and resources can be reliably measured, and this information can be used to classify teachers into groups based on their risk for stress (Lambert et al., 2006; McCarthy et al, 2009; McCarthy et al., 2010; Lambert, 2012; McCarthy et al., 2012; Ullrich et al., 2012; McCarthy et al., in press). Analyses used to classify teachers into the three appraisal groups along with calculated reliability information are presented in the data analysis overview section.

Preventive Resources Inventory-Self-Acceptance Scale (McCarthy, Lambert, Beard, & Dematatis, 2002). The PRI is a self-report measure used to investigate teachers' preventive coping resources. Using a five point Likert scale ranging from "Strongly Disagree" to "Strongly Agree", this measure was designed to assess an individual's level of agreement with items evaluating their perceived ability to prevent stressful reactions to various life circumstances. The PRI in its entirety contains a total of 82 items, including a total preventive resources scale and five scale scores measuring distinct components of preventive coping.

One of these scales, the Self Acceptance Scale (PRI-Self-Acceptance; McCarthy et al., 2002), is a 15-item scale which assesses the degree to which one can accept and/or overcome personal weaknesses in demanding life situations, (sample item, "I may not always get what I want"), (Lambert, McCarthy, Gilbert, Sebree, & Steinley-Bumgarner, 2006). The Self-Acceptance scale has been suggested as an appropriate proxy for the total score from the full-length version of the PRI because it shows the highest correlation with the overall 82-item PRI measure and has been found to be related to level of perceived stress and burnout in teachers (McCarthy et al., 2006). As such, the PRI's Self Acceptance scale was used to measure teachers' self-reports of preventive coping resources in this study.

A number of studies have provided evidence for the reliability and validity of the PRI with college students (McCarthy et al., 2002; Lambert et al., 2006) and teachers (McCarthy et al., 2009; McCarthy et al., 2010). Cronbach's alpha for the total score on the Self Acceptance scale was .859 in this study.

Job Satisfaction (Koeske, Kirk, & Rauktis, 1994). This 14-item scale was originally developed by Koeske et al. to assess human service workers' satisfaction along a range of dimensions (e.g., working conditions, organizational climate, salary, etc.). Koeske et al. reported, developed, and evaluated the validity of the Job Satisfaction measure with data gathered from 600 helping professionals over a 10-year time frame. The original version of the measure asked respondents about their work with "clients" and the measure was adapted by McCarthy et al. (2010) for use with high school teachers, changing "clients" to "students" where appropriate. No other changes were made to the instrument. The 2010 version of this measure was used in the current study. McCarthy et al. reported Cronbach's alpha reliability was .88 and Cronbach's alpha reliability for this sample was .908.

Almost Perfect Scale – Revised (APS–R) (Slaney, Mobley, Trippi, Ashby, & Johnson, 1996). The APS-R is a self-report instrument designed to measure perfectionism. The APS-R consists of 23 items using a 7-point Likert scale 1: Strongly Disagree to 7: Strongly Agree. Sample items include, "I rarely live up to my high standards," and "I expect the best from myself." There are three subscales: High Standards (7 items), Discrepancy (12 items), and Order (4 items) which can be used collectively as a continuous measure of the construct. Exploratory and confirmatory factor analyses support the factor structure and independence of the subscales (Slaney, et al., 2001). The independence of the three scales indicates that the APS-R is suitable for measuring both the positive and negative aspects of perfectionism. APS-R scores have

been used to classify participants as maladaptive perfectionists, adaptive perfectionists, or non-perfectionists by clustering participants based on high and low scores on the three scales (Ulu, Tezer, & Slaney, 2012). Results of a confirmatory factor analysis yielded a goodness-of-fit of .92. Additional studies have provided support for the factor structure as well as the concurrent and discriminant validity of the APS-R (Ashby, Kottman, & Schoen, 1998; Rice, et al., 1998; LoCicero & Ashby, 2000; Suddarth & Slaney, 2001). As this study was interested in perfectionism as a general construct, an overall perfectionism score was generated for each participant and viewed as a continuous variable. Cronbach's alpha for the total score on the APS-R was .852 in this study.

DATA ANALYSIS OVERVIEW & HYPOTHESIS TESTING

The primary purpose of the study was to explore relationships and differences between a teacher's vulnerability to stress, job satisfaction, and school and individual factors. Specifically, this study aimed to describe the relationships and differences between perceptions of classroom demands and resources, perfectionism, preventive coping, school type, and job satisfaction. To address the first research objective, descriptive statistics were conducted to explore means and standard deviations for this sample of Teach For America teachers and alumni. To address the second research objective, relationships between variables were analyzed using Pearson Product correlations. To address the third research objective, an Appraisal Index (further described below) was formed for each respondent and used to classify participants into three groups (Demand, Balanced, and Resourced) based on their "Demand" score and "Resource" score from the CARD. Independent samples T-tests were used to investigate differences between teachers in these three groups for the following dependent variables: preventive coping, job satisfaction, and perfectionism. Finally, to address the fourth

research objective, data analyses for the hypotheses regarding differences between charter and district schools were also conducted using independent samples T-tests to explore differences in perceived demands and resources, perfectionism, preventive coping, and job satisfaction.

Following procedures used by Lambert (2009), classification of teachers using the CARD is accomplished by creating a score for each teacher based on calculating the difference between their total score for the Demands section and their total score for the Resources section of the measure. Consistent with previous studies, the current study used the CARD to compute this "difference score" between the two subscales, placing teachers into three groups: Resourced, Balanced, and Demand. This score is labelled an Appraisal Index as it represents a teacher's overall appraisal of whether their classroom resources are sufficient for the magnitude of classroom demands.

The reliability of a difference score formula (Crocker & Algina, 1986) was used to investigate the reliability of the Appraisal Index. The reliabilities of the scale scores were high (Demands, a=.885, Resources, a=.926) and there was a relatively low correlation between these scales (r=-.182). As such, reliability of the difference score for this sample was .942. This value is similar to reliability of the difference score of .949 found in previous research (Lambert et al., 2007). This reliability value was used to estimate the standard error of measurement of the difference score, and a 95% confidence interval was placed around the score of 0, indicating no difference between Demands and Resources.

Following the transactional model of stress, teachers in this study were classified into three groups based on their appraisals of classroom demands and resources. Using the CARD scoring protocol, teachers who provided difference scores greater than the upper limit of the predetermined interval were classified in the Demands group. Teachers

who provided difference scores below the lower limit of the confidence interval were classified in the Resourced group, having rated Resources greater than Demands. Teachers with difference scores within the interval were classified in the Balanced group, having rated Demands as relatively equal to Resources. This classification strategy allows the researcher to be 95% confident that there are true score differences between the Demand and Resourced groups. Independent samples T-tests were used to investigate differences between the three groups for the following dependent variables: preventive coping, job satisfaction, and perfectionism.

RESULTS

Research Objective 1: To explore means on all variables for Teach For America teachers.

DESCRIPTIVE STATISTICS

An initial calculation of descriptive statistics was performed. This included demographic information such as gender, race and ethnicity, school context, TFA corps members vs. alumni, number of students, grade level taught, and general vs. special education teachers. Descriptive statistics were also performed on the variable scores: demands, resources, preventive coping, perfectionism, and job satisfaction, and are presented in Table 1. The means and standard deviations of all measures given were calculated and outliers were examined.

Table 1: *Table of Means for Dependent Variables*

Measure	*M*	*SD*	*N*
Preventive Coping	3.74	0.51	50
Job Satisfaction	4.57	1.10	39
Demands	3.25	0.50	47
Resources	3.02	.85	43
Perfectionism	5.32	.76	38

Preliminary data analysis was also conducted to check for significant differences by potential confounding variables such as general vs. special education, status as TFA CM or alumnus, and number of students taught on variables of interest: preventive coping, job satisfaction, demands and resources. Neither status as general vs. special education teacher nor number of students taught differed significantly on variables of

interest; however, teachers who were TFA alumni had significantly higher job satisfaction than those in the midst of their two-year commitment.

Research Objective 2: To investigate relationships between perceived resources and demands, preventive coping, perfectionism, and job satisfaction.

Hypothesis 2a: Perceived demands will be negatively correlated with preventive coping.

Hypothesis 2b: Perfectionism will be negatively correlated with preventive coping and low resource scores, but positively correlated with higher demand scores.

To investigate research question two, Pearson Product correlations of the measures were conducted. Scores were analyzed to explore the relationship between resources, demands, preventive coping, perfectionism, and job satisfaction scores. The results of this analysis are presented in Table 2 below. Preventive coping was moderately negatively correlated with CARD demand score ($r = -.34$, $p < .05$), indicating that having higher preventive coping resources is related to perceiving classroom demands as lower. Likewise, preventive coping was also moderately negatively correlated with perfectionism score ($r = -.405$, $p < .05$), suggesting that having higher preventive coping resources is linked to lower levels of perfectionism. Perfectionism score was also moderately negatively correlated with CARD resource score ($r = -0.39$, $p < .05$), indicating that higher levels of perfectionism are related to lower perceptions of classroom resources. While not statistically significant, the CARD resource score's relationship to job satisfaction ($r = .27$) and perfectionism to job satisfaction ($r = -.28$) were both related in the predicted directions.

Table 2: *Correlations between scale scores*

Measure	*m*	*SD*	1	2	3	4
1. Preventive Coping	3.74	0.51				
2. Job Satisfaction	4.57	1.10	.26			
3. CARD Demands	3.61	.56	-.33*	-.34*		
4. CARD Resources	3.81	.92	.07	.57**	.18	
5. Perfectionism	5.32	.76	-.41*	-.28	.41**	-.41*

Note. *$p < .05$.

Research Objective 3: To replicate the three-group classification system found in previous research and to investigate whether teachers classified in the three Appraisal groups differed on measures of preventive coping, perfectionism, and job satisfaction.

Hypothesis 3a: Membership in the "Demand" group will exceed the membership numbers in either the Balanced or Resourced groups.

Hypothesis 3b: Preventive coping scores and job satisfaction scores will be significantly higher for teachers in the "Resourced" group when compared with teachers in the "Demand" group.

Hypothesis 3c: Perfectionism scores will be significantly higher for teachers in the "Demand" group when compared with teachers in the "Resourced" and "Balanced" groups.

As described above, the CARD yields a Demands score (mean=54.17, SD=8.22), a Resources score (mean=41.13, SD=12.68), and the Appraisal Index based on the differences between the two scale scores (mean=13.04, SD=15.96). T score scaling (mean=50, SD=10) is used for the Demands and Resources scale. Therefore, this sample of teachers reported, on average, higher than average levels of classroom demands and

lower than expected levels of classroom resources. Compared to the national norm for the Appraisal Index (mean=0, SD=15), this sample of teachers reported higher than average stress levels.

Research objective three was addressed by classifying teachers into groups based on their Appraisal Index score as described in the previous section, resulting in the following distribution across the three groups: Resourced N=5(11.6%), Balanced N=11 (25.6%), and Demands N=27(62.8%). Therefore a substantial majority of Teach For America corps members and alumni teachers can be considered as at risk for occupational stress. Previous study results typically yield proportions that are more evenly distributed across the three groups. For example, Lambert et al. (2007) found the following proportions using a sample of teachers in Texas, North Carolina, and South Carolina: Resourced n=88 (31.9%), Balanced n=91 (33.0%), and Demands n=97 (35.1%).

Consistent with methods used in prior research with CARD groupings, the investigator planned to used a Oneway ANOVA to investigate differences between the three groups for the following dependent variables: preventive coping, job satisfaction, and perfectionism. However, once the data were collected, descriptive statistics indicated that the total N for participants in the Resource group was insufficient to conduct these analyses. Tabachnik and Fidell (1996) assert that if the ratio of the largest to the smallest sample size between groups exceeds 4:1, and the ratio of the largest sample variance to the smallest sample variance exceeds 10:1, then the ANOVA results are invalid. Because the number of teachers in the Demand group (N=27) is more than four times as large as the number of teachers in the Resourced group (N=5), the results did not meet the required ratio. Because T-test results can be reported assuming different variances for each sample, as an alternative analysis, the Balanced and Resourced groups

were combined and independent samples T-tests were run for each of the dependent variables.

Hypotheses 3b and 3c were addressed by examining group differences for the two CARD stress groups (Demand group and combined Balanced & Resourced group) on the following dependent variables: perfectionism, preventive coping, and job satisfaction. As shown in Table 3, there were statistically significant differences between the two groups for perfectionism: demand group (M=5.53, SD=.77) and non-demand group (M=4.93, SD=.56); t(31.89)= -2.71, p = .011. Likewise, there were statistically significant differences between the two groups for job satisfaction: demand group (M=4.13, SD=.86) and non-demand group (M=5.44, SD=1.04); t(20.38)=3.91, p = .001. When comparing the Demand group to the participants in the non-Demand group (made up of the Balanced and Resourced teachers), results indicate that those in the Demand group have statistically significantly higher perfectionism scores and significantly lower job satisfaction scores.

The following differences between the Demand and non-Demand group, reported as effect sizes, were found: Perfectionism (d = -.403) and Job Satisfaction (d = .566). In prior studies, effect sizes (d) of less than .20 are considered small, approximately .50 is moderate, and .80 and above are large. The magnitude of these differences was moderate for both variables.

Table 3: *Mean Differences by Appraisal Group*

Measure		Demand Group *N*=27	Non-Demand Group *N=16*	Demand vs. Non Demands Effect Size
Perfectionism	N	25	13	-0.403
	Mean	5.53*	4.93*	
	SD	.77	.56	
Preventive Coping	N	27	16	.033
	Mean	3.69	3.73	
	SD	.54	.48	
Job Satisfaction	N	26	13	.566
	Mean	4.13***	5.44***	
	SD	.86	1.04	

Note sample size varies by measure due to missing data. * = p<.05, ** = p<.01, ***p<.001

Research Objective 4: to investigate differences between charter school and district school teachers on measures of perceived resources and demands, preventive coping, and job satisfaction.

Hypothesis 4a: Perceived resources scores will be significantly higher for teachers at charter schools when compared with teachers at district schools.

Hypothesis 4b: Teachers at district schools will have significantly higher demand scores.

To investigate research question four, independent samples T-tests were conducted for the following dependent variables: preventive coping, job satisfaction, perfectionism, and scores on perceptions of classroom resources and demands. There was one independent variable, school context, with two respective levels: charter and district schools. As shown in Table 4, there were statistically significant differences between

charter and district school teachers only in terms of perceived resources: charter (M=4.16, SD=.59) and district (M=3.47, SD=1.05); t(33.50)= -2.65, p = .012. While difference in perceived demands was not significantly different for those in charter vs. district schools, teachers at charter schools showed significantly higher perceived resources than their district school colleagues.

Table 4: *Mean Differences in Variables by School Type*

Measure		Charter *N*=26	District *N=24*
Preventive Coping	N	26	24
	Mean	3.77	3.70
	SD	.50	.52
Job Satisfaction	N	19	20
	Mean	4.82	4.33
	SD	1.26	.89
Demands	N	23	24
	Mean	3.51	3.70
	SD	.65	.46
Resources	N	21	22
	Mean	4.16*	3.47*
	SD	.59	1.05

Note sample size (N) varies by measure due to missing data. Note. * = p<.05, ** = p<.01, *** p<.001

DISCUSSION

SUMMARY

Current research suggests that the attrition rate for novice teachers has been on the rise for over a decade and that chronic stress plays a significant role in the rates of new teachers entering, then leaving, the profession (Ingersoll, 2001; Klassen & Chiu, 2011). Stress in educational settings is widely acknowledged, though specific factors contributing to teacher stress is not well understood (McCarthy et al., 2009). Recent studies have paid increasing attention to this issue; however, most of this research has contributed to our understanding of the external school and/or classroom factors linked to teacher stress (Lambert et al., 2007 & 2012; Zellars, Hochwarter, & Perrewe´, 2004.) Research suggests that most of the variance in teacher stress levels is at the individual teacher rather than school building level (McCarthy et al., 2009; Ullrich et al., 2012), though little is known about the individual teacher factors contributing to a teacher's vulnerability to stress, especially among teachers newest to the profession.

Concurrent with the "revolving door" of novice teachers joining, then leaving, the teaching profession, is the rise in number of charter schools and charter school management organizations across the nation (National Alliance for Public Charter Schools, 2013). As numbers of charter schools rise with increasing (and critical) attention paid to student achievement outcomes, it will be crucial to understand factors affecting teacher attrition in the charter school setting as it compares to traditional district school settings.

Accordingly, the current study sought to address these gaps in the literature by collecting data from a unique sample of novice teachers to explore vulnerability to stress, job satisfaction, personal coping, perfectionism, and school context. This study extended prior research by McCarthy and colleagues by (1) comparing teachers in charter and

district schools, (2) sampling from a novice teacher population (Teach For America corps members and recent alumni) teaching in exclusively low-income neighborhoods, and (3) adding perfectionism as an individual teacher factor.

The current study had four primary research objectives: first, to investigate the means on all variables of interest for this unique sample of Teach For America teachers and alumni. Second, the study sought to investigate relationships between perceived resources and demands, preventive coping, perfectionism, and job satisfaction. Next, this study replicated procedures used in previous research with the CARD by classifying teachers into three Appraisal groups and exploring group differences between the variables of interest. Finally, this study sought to investigate differences between charter school and district school teachers on in terms of perceived resources and demands, preventive coping, and job satisfaction. As mentioned previously, this study extended previous research using the CARD by examining perfectionism and school context.

Investigating the first research objective, this sample of teachers reported higher than average levels of classroom demands and lower than expected levels of classroom resources. Compared to the national norm for the Appraisal Index (mean=0, SD=15), this sample of teachers also reported higher than average stress levels. These findings support that transactional models of stress, taking into account a teacher's perceptions of demands and resources, continue to provide a useful framework through which this construct can be examined (Chang, 2009; Steinhardt, Jaggars, Faulk, & Gloria, 2011).

Next, looking at relationships between perceptions of demands and resources, preventive coping, job satisfaction, and perfectionism, results indicate that higher levels of preventive coping were related to lower perceptions of classroom demands and lower perfectionism scores. The negative relationship between preventive coping and classroom demands supports findings from recent research (McCarthy et al., in press; 2010; &

2009). Finally, higher levels of perfectionism were related to lower perceptions of classroom resources, a finding unique to the current study, which suggests the need for further research with larger and more diverse samples of teachers.

Transactional models propose that stress results from perceptions that demands outweigh resources available to meet the demands, causing an individual to appraise a life circumstance as a threat rather than a challenge (Lazarus & Folkman, 1984; McCarthy et al., 2010). Based on this model and in accordance with procedures found in previous research, participants were classified into appraisal groups based on scores on a measure of classroom demands and resources. Once classified into one of the groups (Demand and non-Demand) group differences across variables used in previous research (job satisfaction as well as preventive coping) as well as perfectionism (which was not examined in previous reseach) were examined. Membership in the Demand group (those indicating that their classroom demands exceeded their resources) for this sample was 62.8%, exceeding previous research findings that tend to yield a more balanced distribution across all three groups. In fact, membership in the Resource group was so low (N=5) that analyses used in previous research with the CARD could not be used. The results for research question three of this study supported transactional theories of stress in that teachers were reliably classified into three groups using the Appraisal Index from the CARD (Demand, Balanced, and Resourced) based on their appraisals of classroom demands and resources (Lambert et al., 2007).

Inconsistent with findings in previous research, teachers classified in the Demand group as a whole were not found to have lower levels of preventive coping resources (McCarthy et al., 2009; 2010; & in press). Despite this inconsistency, additional findings from the same investigators using a small sample (N=77) also demonstrated no significant differences between groups on preventive coping resources (McCarthy et al.,

2012), indicating that this construct should be further investigated with larger sets of both novice and veteran teachers. While preventive coping did not differ significantly between members of the two groups, members in the Demand group had significantly higher perfectionism scores and significantly lower job satisfaction scores, each with moderate effects sizes. The finding that Demands group teachers were more likely to report lower job satisfaction is consistent with previous research findings (McCarthy et al., in press; Lambert et al., 2012; McCarthy et al., 2010) demonstrating that Demands teacher are less satisfied with being a teacher.

As previously mentioned, Demand group teachers had significantly higher perfectionism, a construct not previously explored with teachers. This finding underscores the role of individual factors placing teachers at risk for occupational stress found in previous research (Friedman, 2006; Klassen & Chiu, 2011; Lambert, 2012; McCarthy et al., 2006, 2009, & 2010). Coupled with its significant moderate relationship with perceived resources from research objective two, these results indicate that being a perfectionist may make a teacher more vulnerable to stress. In other words, the higher the perfectionism, the lower a teacher perceives the helpfulness of the resources at his disposal, and the more likely he is to be vulnerable to stress. This finding is in accordance with research by Slaney et al. (2001), which suggests that having high standards for performance (by examining the High Standards scale on the APS-R) may be more positively associated with measures of achievement rather than with positive psychological dimensions. Likewise, the second scale on the APS-R (Discrepancy), which measures discomfort resulting from discrepancy between standards and performance, was found to be positively and significantly related to negative psychological adjustment indicators. Over half of all APS-R items make up the Discrepancy scale, which may help to explain why being perfectionistic is related to

perceiving a perilous imbalance between classroom demands and resources and higher vulnerability to stress.

Finally, while differences in perceived demands were not significantly different for those in charter vs. district schools, teachers at charter schools showed significantly higher perceived resources. As such, teaching in a charter school may buffer a teacher's vulnerability to stress as compared to their district school colleagues.

Results from this study could inform decisions on how best to support novice teachers in similar settings who share similar individual characteristics. For example, recent research using the CARD demonstrated that teachers classified in the Demand group were not only less satisfied with being a teacher, they were also more likely to report an intention to leave the field (McCarthy et al., in press; Lambert et al., 2012; McCarthy et al., 2010). As such, these findings may not only have implications for administrators and policymakers interested in strategies to reduce teacher stress, but identifying and supporting novice teachers at risk for stress and low satisfaction may improve teacher retention.

LIMITATIONS & FUTURE DIRECTIONS

The current study has a number of limitations. First, due to the study's correlational nature, results obtained cannot infer causation. Experimental and/or longitudinal designs aimed at improving preventive coping, reducing maladaptive perfectionism, and/or improving access to resources teachers find most helpful would be challenging but necessary future designs for determining how these constructs influence teacher stress and/or job satisfaction.

Next, since the results are based on teacher self-report (survey data), school and classroom data such as access to curricular resources was not verified independent of

teachers' responses. Teachers may not be completely objective and accurate in their perceptions of the resources available to them. Additionally, while a study that surveyed over 500 elementary school teachers found that CARD scores did not vary as a function of the time of year (Fall or Spring) or Title I status, (O'Donnell et al., 2008), participants took this survey at the conclusion of the school year or at the beginning of the summer break (May and June of 2012 and 2013) which may have influenced results potentially due to feelings of burnout, exhaustion, or even relief. Another limitation of this study is its reliance on self-report measures administered to participants at a single point in time. This might have been especially problematic given that some of the measures used are considered to be stable and reflective of trait-level constructs. As such, participants may have been unwilling or unable to disclose their global traits at the particular study time, which might confound results. One recommendation, therefore, would be future research using multiple and potentially various ways of measuring these variables (e.g. observations, third-party reporting, etc.).

One of the core limitations in this study relates to the sample itself. This study analyzed a very small sample of teachers, who were of a narrow age range, teaching in only a few geographical areas, all of which pose a threat to external validity. As membership in the Resource group was so low (N=5), future research should increase the sample size to determine the incidence of TFA teachers who may be classified as Resourced. Additionally, all study participants were current or former members of Teach For America, a non-profit organization that operates from a set of core values and expectations of its teachers that may very well influence its members and alums. For example, TFA corps members are encouraged to set ambitious student achievement goals each year and are required to report their student achievement data to the organization. As such, these organizational values and requirements may influence these teachers'

perceptions of the demands placed upon them, the availability of their preventive coping resources, as well as potentially inflating perfectionism scores.

Additionally, about 25 percent of participants who started the study dropped out prior to completing all four measures, suggesting that some teachers may not have time to complete the study or had competing priorities. Moreover, the APS-R and Job Satisfaction scales were placed at the end of the survey and thus have less respondent data to analyze when compared to the PRI and CARD measures. Although some sampling issues were controlled for in subsequent analyses, their existence highlights the problems inherent in generalizing these results to Teach For America teachers and novice teachers at large.

Finally, while results suggested that teachers at charter schools were more likely to rate their resources higher than those at district schools, it is critical to acknowledge that due to freedom from district mandates, charter schools can vary greatly in terms of allocation of resources, organizational culture, structure, and so on. Indeed, approximately 83% of the charter school teachers in this sample taught at charter schools that are part of larger charter management organizations (CMOs) that benefit from years of experimentation and experience with their educational models. As such, teachers in this sample showing a smaller discrepancy between demands and resources may be overrepresented in this sample and future studies should aim to recruit more balanced numbers of teachers from both CMOs and independent charter schools.

These limitations also present a number of avenues for future research. Future research could replicate the classification system from this study to analyze whether teachers in each of the three groups acutally stay in or leave their positions or the profession the following year. Because TFA corps members commit to only two years in

the classroom, attrition data from this sample would not likely generalize to novice teachers.

Analysis of the specific demands and/or lack of resources that most often led teachers to membership in the Demand group might lead to ways for administrators and policy-makers to mitigate or minimize teachers' perceptions of these demands. Further analysis of the specific demands and/or resources that influence teachers' perceptions of their ratio of resources to demands could be explored using hierarchical regression or discriminate analysis. Further research could also be conducted on whether teacher perceptions of classroom factors (for example student behavior or access to materials) are due to perception and whether independent data about their classrooms matches these perceptions. Collecting observational data and exploring other qualitative methods could also help to illuminate these variables in vivo, impacting the validity of the self-reports used in studies such as this. While self-report measures of teacher stress are consistent with transactional models of stress that emphasize the role of individual perceptions (McCarthy et al., 2009), this study did not attempt to collect observational data, which could be an important direction for future research. For example, in order to provide further support for the transactional model used in this study, a longitudinal study would be important to assess if teachers classified in the high demand group actually left the profession in subsequent years.

Because the APS-R is suitable for measuring both the positive and negative aspects of perfectionism via its High Standards, Order, and Discrepancy scales (Slaney et al., 2001), future research could explore scores on each of these scales to explore how they may influence membership in the Demand group, job satisfaction, and/or preventive coping. Studies exploring the results of these three scales with teachers could lead to

findings that would aid administrators in fostering the more adaptive traits of their perfectionistic teachers.

Other variables could be important to the stress and coping process. For example, additional individual teacher factors that were not explored in this study such as age, gender, years spent in the classroom, certification status and additional personality factors could deepen our understanding of how subgroups of teachers are perceiving their work. Moreover, additional external factors related to classroom and school community should be considered and compared, such as general vs. special education, urban vs. rural districts, and teaching in high vs. low-income communities.

Finally, future longitudinal studies would be beneficial in understanding whether teachers actually stay in their current teaching positions as predicted by their stress levels, preventive coping resources, and job satisfaction. Because a teacher's primary goal is the success of her students, it will also be critical to examine how scores on perceptions of demands, resources, preventive coping, job satisfaction, and even perfectionism may influence or predict actual student achievement results.

CLINICAL IMPLICATIONS

Given the high rates of teacher turnover in the first few years of entering the profession, identifying novice teachers at highest risk for stress and low job satisfaction could be critical in working to improve teacher retention so that more students are taught by more teachers with more experience. The findings of this study suggest that novice teachers perceiving the highest demand levels, posessing the less preventive coping resources, and high levels of perfectionism may be particularly vulnerable to stress, low job satisfaction, or both. Early identification and assessment of such teachers could help

administrators and other school personnel to support and intervene before these teachers are lost to the field.

The results suggest that adminstrators and other school personnel interested in reducing or preventing teacher stress and low job satisfaction can benefit from identifying teachers who may feel burdened by classroom demands or perceive their personal and/or classroom resources as low. Additionally, idenifying teachers who have more perfectionistic tendencies or lower preventive coping resources would allow administrators to select appropriate professional development opportunities and training programs for their staff. so that student achievement goals can remain ambitious and feasible. Assessing teachers' perceptions of specific school demands and/or particularly helpful classroom resources could help administrators better determine allocation of funds in certain areas. Moreover, this process could also simply shine a light on areas in which teachers may not be aware of or fully utilizing existing resources. Similarly, these findings suggest that administrators can benefit from being more aware of teachers who tend to display high levels of perfectionism and/or lower levels of preventive coping resources especially when considering placing additional demands upon teachers and the communication with which they do so.

While advances in the past 5-10 years have been made in understanding teacher stress, we have much more work to do in further exploring individual teacher characteristics at play. Additionally, future studies should continue to explore the organizational climate and other factors affecting teachers at charter schools as the charter movement rapidly progresses. In doing so, researchers have an opportunity to then develop and pilot interventions for teachers who experience stress, and knowing whether school level or individual teacher factors need to be addressed will be key. In an era of unpredictable educational budgets, increasing accountability, movement toward

common core student achievement standards, and subsequent high expectations for educators, it is likely that classroom demand levels will remain high. It is therefore essential that researchers, administrators, policymakers, and all others interested in teacher welfare continue to research, promote, and support interventions for teachers experiencing stress and its consequences.

IMPLICATIONS FOR TEACH FOR AMERICA

Teach For America has sustained exponential growth since its inception in 1989. In the 2013-2014 school year Teach For America reported approximately 11,000 first and second year corps members are teaching in both urban and rural low-income communities across the nation, joining approximately 32,000 alumni who have taught through this organization (http://www.teachforamerica.org/our-organization). Current study results have implications for this organization that may aid in the training, support, and development of its rapidly growing corps.

TFA places its corps members in both special and general education positions at both charter and district schools. Preliminary data analysis for this sample was conducted to check for significant differences by potential confounding variables such as: general vs. special education, status as TFA CM or alumnus, and number of students taught, along with the aforementioned variables of interest in this study. While neither status as general vs. special education teacher nor number of students taught differed significantly on variables of interest, teachers who were TFA alumni had significantly higher job satisfaction than those in the midst of their two-year commitment. While these results are not surprising considering that confidence and efficacy may increase with years of experience, TFA might benefit from interviewing members of its alumni base who opted

to remain in the classroom to explore factors that may underlie higher these higher levels of satisfaction.

The finding that TFA teachers in the Demand group had significantly higher levels of perfectionism coupled with TFA's efforts to recruit individuals with records of high achievement and perseverance suggests that support personnel could make efforts to tweak its support and/or development models. For example, each corps member is assigned a Manager of Teacher Leadership and Development (MTLD) who is responsible for the effectiveness, retention, and satisfaction of a group of local corps members. MTLDs frequently visit corps members' classrooms and hold debriefing meetings in an effort to provide assistance, support, and resources to aid in corps member development as teachers. Given results of the current study, MTLDs might benefit from knowledge of subsets of corps members perceiving that their demands outweigh their resources as well as knowledge of their corps members who have lower scores on preventive coping and/or higher levels of perfectionism. With his knowledge, MTLDs would be better able to allocate their time and energy to better meet the needs of these teachers. Furthermore, knowledge of those corps members with higher levels of preventive coping and satisfaction along with lower levels of perfectionism could allow MTLDs and other support personnel to place such teachers in mentorship roles with corps members who struggle in the classroom.

As an organization, identification of such corps members might allow for consideration of forming strategic MTLD groups; for example, lowering the MTLD to corps member ratio for corps members who are most vulnerable to stress and low satisfaction based on PRI, APS-R, and/or CARD scores. Further, knowledge of corps member vulnerability to stress could indicate the utility of stress management trainings during the two-year teaching commitment. Additionally, using the perfectionism and

preventive coping measures during pre-service training could allow TFA support personnel to preemptively provide support structures to specific corps members before classroom demands become a daily reality. Finally, findings from the current study suggesting significantly higher perceived resources for corps members at charter schools could inform decisions regarding the allocation of time and support given to corps members in district school placements.

CONCLUSION

This exploratory study aimed to add to the teacher stress literature by applying several measures to explore its relationships with preventive coping, perfectionism, job satisfaction, and school context (district vs. charter schools). By understanding the relationships among these variables, researchers, school administrators, and policymakers could propose changes and interventions aimed at reducing teacher stress, increasing job satisfaction, and ultimately improving retention rates in the nation's teacher force.

Gaining an understanding of the factors that influence a teacher's vulnerability to stress and/or lower job satisfaction can help inform professional development programming, novice teacher support structures, and teacher training programs at large. Using this preliminary examination of coping, perfectionism, job satisfaction and vulnerability to stress as a basis, future studies can deepen knowledge and practice in how to assist teachers, teacher educators, administrators and policymakers in dealing with the realities of this highly demanding profession, benefitting students and teachers alike.

APPENDICES

APPENDIX A

Preventive Resources Inventory – Self-Acceptance Scale (PRI; McCarthy et al., 2002).

Preventive Resources Inventory
(Self-Acceptance Scale)

Developed by Christopher McCarthy, Ph.D. University of Texas at Austin
Richard G. Lambert, Ph.D. University of North Carolina at Charlotte
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Using the scale below, please rate the extent to which you agree or disagree with the following statements by circling a response.

1 = Strongly Disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree

1.	I know who I am.	☐	☐	☐	☐	☐
2.	I know how to think about situations in a positive way.	☐	☐	☐	☐	☐
3.	I am comfortable with the circumstances in my life.	☐	☐	☐	☐	☐
4.	I have goals that keep me focused.	☐	☐	☐	☐	☐
5.	I lead a well-rounded life.	☐	☐	☐	☐	☐
6.	When problems come up in one area they don't affect my overall happiness.	☐	☐	☐	☐	☐
7.	I do not want to trade my life for anyone else's life.	☐	☐	☐	☐	☐
8.	I have enough money for my needs.	☐	☐	☐	☐	☐
9.	I am able to prevent stress by having clear values in my life.	☐	☐	☐	☐	☐
10.	I can accept the fact that things will not always turn out the way I want.	☐	☐	☐	☐	☐
11.	I accept my imperfections.	☐	☐	☐	☐	☐
12.	I am grateful for who I am.	☐	☐	☐	☐	☐
13.	I may not always get what I want.	☐	☐	☐	☐	☐
14.	I have limitations.	☐	☐	☐	☐	☐
15.	I can usually see many ways to attack a problem.	☐	☐	☐	☐	☐

16. Do you have any additional comments regarding how you can prevent stress?

APPENDIX B

Classroom Appraisal of Resources and Demands

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We are interested in learning about the demands of your classroom and teaching responsibilities and the resources you have to handle those demands. Your responses will be kept strictly confidential and anonymous. No information about your individual responses will be shared with anyone. We appreciate your time in completing this questionnaire.

1. How many years have you worked as a teacher? (Not including time spent as a student teacher, teaching assistant, or paraprofessional.)

_____

2. How many years have you worked at your current school?

_____

3. What is the highest degree you have completed? H.S. ___ Technical School ___ A.S. ___ BS/BA ___ M.S/M.A. ___ Doctoral ___

Please list your degree(s) including any majors, minors, specializations, etc.

4. In what fields were your degree(s)?

5. Are you currently working toward a degree?

6. If so, please describe field and degree:

7. What is your age?

_____

8. What is your gender?

_____

9. How do you identify racially or pan-ethnically?

Asian Am. ____ Black ____ Latino/Hispanic _____ Native Am. _____ White _____ Other _____ (please specify)

10. What type of school is your school? Public District School ____ Public Charter School ___ Private/Independent School ___

11. If you teach at a charter school, is your charter school independent (stand alone) or part of a charter management organization (i.e. there are several schools in your network)?
Independent Charter ____ Charter Mgmt. Organization ____

12. What grade(s) do you teach?

13. Are you a Special Education teacher (push-in, pull out, collaborative team teaching)?

14. How many students do you teach?

15. What subjects are you responsible for teaching (delivering the instruction) this year?
Reading ___ Writing ___ Math ___ Social Studies ___Science ___ Other (please list or specify)

16. What subjects are you responsible for planning (planning the actual instruction) this year?
Reading ___ Writing ___ Math ___ Social Studies ___Science ___ Other (please list or specify)

17. How many hours per week do you spend planning?

18. How many planning or preparation periods do you have per week?

19. How long are your preparation periods?

20. How many preparation periods per week are mandated for meetings or professional development?

21. What are your required at-school hours?
__:__ to __:__

22. What are your actual at-school hours?
__:__ to __:__

23. What type of schedule did your school use last year? (Secondary teachers only) 4x4 Block_____ A/B Day Block_____
Hybrid Block_____
Traditional_____ Other _____ Unsure_____

24. In each blank tell us how many courses at each of the following levels you taught (secondary teachers only):
Remediation_____ Regular_____ Honors/Advanced_____ AP/IB_____

25. Are there any other features of your teaching context that make it unique?

Tell us about the students in your classroom.

26. How many students have come from homes in which English is not the primary language?
_____

27. How many students are developmentally or academically behind most of the other students?
_____

28. How many students have Individualized Education Plans (I.E.P.s)?
_____

29. How many students have physical disabilities (ex: blindness, deafness, spina bifida)?

_____

30. How many students are gifted, talented, or academically advanced?

_____

31. How many students are homeless or transient?

_____

32. How many students have poor attendance?

_____

33. How many students are chronically late to school?

_____

34. How many students consistently engage in behaviors that are challenging for you?

_____

Using the scale below, rate how demanding you find each of the following.

1 = Not Demanding 2 3 = Somewhat Demanding 4 5 = Very Demanding
N/A = Non Applicable

35. Number of students in the classroom or number of students taught per day.	1	2	3	4	5	NA
36. Working with students from homes in which English is not the primary language.	1	2	3	4	5	NA
37. Working with students who are performing below grade level.	1	2	3	4	5	NA
38. Working with students who have Individualized Education Plans (IEPs).	1	2	3	4	5	NA
39. Working with students who have physical disabilities.	1	2	3	4	5	NA
40. Working with students who are gifted, talented, or academically advanced.	1	2	3	4	5	NA
41. Homeless or transient students.	1	2	3	4	5	NA
42. Students with poor attendance.	1	2	3	4	5	NA
43. Students who are chronically late.	1	2	3	4	5	NA
44. Working with students and families from diverse cultural backgrounds.	1	2	3	4	5	NA
45. Students with problematic behaviors (not following directions, disrupting class, etc.).	1	2	3	4	5	NA
46. Test preparation.	1	2	3	4	5	NA

47. Hours spent at work/hours spent beyond required working hours.	1	2	3	4	5	NA
48. Pace of daily schedule.	1	2	3	4	5	NA
49. Paperwork or administrative requirements (attendance records, report cards, data input).	1	2	3	4	5	NA
50. Administrative disruptions to the daily schedule (assemblies, fire drills, classroom phone)	1	2	3	4	5	NA
51. Lack of physical classroom space.	1	2	3	4	5	NA
52. Classroom environment conditions (heating, cooling, lighting, etc.).	1	2	3	4	5	NA
53. Lack of instructional resources (teacher guides, professional development workshops,coaches, mentor teachers, etc.)	1	2	3	4	5	NA
54. Lack of instructional materials (books, manipulatives, literacy centers, maps, science materials, etc.)	1	2	3	4	5	NA
55. Lack of instructional supplies (consumable materials such as pencils, paper, markers, chart paper, crayons, access to copy machines).	1	2	3	4	5	NA
56. Lack of classroom technology (computers, software, printers, SmartBoards, etc.).	1	2	3	4	5	NA
57. Outdated or worn out instructional materials.	1	2	3	4	5	NA
58. Using your own personal money for classroom resources, materials, or supplies.	1	2	3	4	5	NA
59. Time and effort spent working with protégé teachers (teachers you are mentoring).	1	2	3	4	5	NA
60. Meetings and/or trainings you are required to attend.	1	2	3	4	5	NA
61. Time spent performing non-teaching-related duties (monitoring bus, cleaning, lunch duty duty, etc.).	1	2	3	4	5	NA
62. Summative, formal, or school/state-mandated testing and assessments.	1	2	3	4	5	NA
63. Formative assessments (quizzes, portfolios, performance assessments, observation notes, other teacher ratings of student achievement).	1	2	3	4	5	NA
64. Grading student work.	1	2	3	4	5	NA
65. Planning (lesson, unit, or long term).	1	2	3	4	5	NA
66. Setting up the classroom and materials for instructional activities.	1	2	3	4	5	NA

67. Unexpected changes to your daily or weekly schedule.	1	2	3	4	5	NA
68. Changes to expectations of job performance.	1	2	3	4	5	NA
69. Working with a co-teacher (you share the same roster).	1	2	3	4	5	NA
70. Working with teaching assistants or paraprofessionals assigned to your classroom.	1	2	3	4	5	NA
71. Working with parents.	1	2	3	4	5	NA
72. Working with administrators.	1	2	3	4	5	NA
73. Working with other teachers.	1	2	3	4	5	NA
74. Students who use non-standard English common to their cultural group in assignments.	1	2	3	4	5	NA
75. Experiences in the classroom when your own racial, ethnic, or SES background is different than most of the students.	1	2	3	4	5	NA
76. Comments from students about your own cultural identity.	1	2	3	4	5	NA
77. Students who make ethnic and racial slurs or other derogatory comments about certain groups (i.e., "That's so gay," "Retarded," "Indian giver," etc.)	1	2	3	4	5	NA
78. Dealing with parents who feel their child may be taught, evaluated, or disciplined differently because of the child's race or ethnicity.	1	2	3	4	5	NA
79. Who question or make assumptions about your race or ethnicity during a phone conversation or other interaction.	1	2	3	4	5	NA
80. Responding to colleagues' disparaging remarks about your racial or ethnic group.	1	2	3	4	5	NA
81. Overall how demanding is your job on a daily basis this academic school year?	1	2	3	4	5	NA

Using the scale below, rate how helpful each of these resources is with classroom and teaching responsibilities.

1 = Not Helpful	2	3 = Somewhat Helpful	4
5 = Very Helpful			

82. Aides, assistants, and/or paraprofessionals.	1	2	3	4	5	NA
83. Parent support (volunteers) in the classroom.	1	2	3	4	5	NA
84. Parent support of school learning activities (field trips, providing extra	1	2	3	4	5	NA
85. Parent support of learning activities at home (homework, enrichment	1	2	3	4	5	NA
86. Adult mentors from the community.	1	2	3	4	5	NA
87. Administrators at your school.	1	2	3	4	5	NA
88. Office staff at your school.	1	2	3	4	5	NA
89. Department Chairs or Grade Team Leaders	1	2	3	4	5	NA
90. Support personnel for students with Individualized Education Plans	1	2	3	4	5	NA
91. Support personnel for students with physical disabilities.	1	2	3	4	5	NA
92. Support personnel for gifted or talented students.	1	2	3	4	5	NA
93. Support personnel for students with limited English skills.	1	2	3	4	5	NA
94. Support personnel for working with students from diverse cultural	1	2	3	4	5	NA
95. Support personnel for students with problem behaviors.	1	2	3	4	5	NA
96. Support personnel for students performing below grade level.	1	2	3	4	5	NA
97. Support personnel for computers and instructional technology.	1	2	3	4	5	NA
98. Counselors, school psychologist, family services or social workers.	1	2	3	4	5	NA
99. Special area or enrichment teachers.	1	2	3	4	5	NA
100. Teachers who are your peers.	1	2	3	4	5	NA
101. Mentor teachers (teachers mentoring you).	1	2	3	4	5	NA
102. Staff development workshops and programming.	1	2	3	4	5	NA
103. Materials for students with learning disabilities.	1	2	3	4	5	NA
104. Materials for students with physical disabilities.	1	2	3	4	5	NA
105. Materials for gifted or talented students.	1	2	3	4	5	NA
106. Materials for students with limited English skills.	1	2	3	4	5	NA
107. Materials for students from diverse cultural backgrounds.	1	2	3	4	5	NA
108. Materials for students with problem behaviors.	1	2	3	4	5	NA
109. Materials for students performing below grade level.	1	2	3	4	5	NA
110 Instructional resources (teacher guides, professional development, coaches, mentors, etc.)	1	2	3	4	5	NA
111. Instructional materials (books, literacy centers, manipulatives, science materials, etc.).	1	2	3	4	5	NA

112. Instructional supplies (consumable materials such as pencils, paper, markers, chart paper pape crayons, access to copy machines, etc.).	1	2	3	4	5	NA
113. Planning or preparation periods.	1	2	3	4	5	NA
114. Amount of time you have in each planning or preparation period.	1	2	3	4	5	NA
115. Overall, how would you rate the resources available to help you with the demands of your classroom?	1	2	3	4	5	NA

APPENDIX C

Job Satisfaction Scale: Koeske, Kirk, & Rauktis, 1994

Using the scale below, rate how satisfied you are with each of the following aspects of your current teaching job.

1 = Very Dissatisfied 4 = Neither Satisfied or Dissatisfied 7= Very Satisfied

1. Working with students.
2. The amount of authority or autonomy you have been given to do your job.
3. Your salary and benefits.
4. Opportunities for promotion.
5. The challenge your job provides.
6. The quality of supervision you receive.
7. Chances for acquiring new skills.
8. Amount of student contact.
9. Opportunities for really helping people.
10. Clarity of guidelines for doing your job.
11. Opportunity for involvement in decision-making.
12. The recognition given your work by your supervisor.
13. Your feeling of success as a professional.
14. Field of specialization you are in.

APPENDIX D

Almost Perfect Scale-Revised

Instructions

The following items are designed to measure attitudes people have toward themselves, their performance, and toward others. There are no right or wrong answers. Please respond to all of the items. Use your first impression and do not spend too much time on individual items in responding.

Respond to each of the items using the scale below to describe your degree of agreement with each item. Fill in the appropriate number circle on the computer answer sheet that is provided.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree

1. I have high standards for my performance at work or at school.
2. I am an orderly person.
3. I often feel frustrated because I can't meet my goals.
4. Neatness is important to me.
5. If you don't expect much out of yourself, you will never succeed.
6. My best just never seems to be good enough for me.
7. I think things should be put away in their place
8. I have high expectations for myself.
9. I rarely live up to my high standards.
10. I like to always be organized and disciplined.
11. Doing my best never seems to be enough.
12. I set very high standards for myself.
13. I am never satisfied with my accomplishments.
14. I expect the best from myself.
15. I often worry about not measuring up to my own expectations.
16. My performance rarely measures up to my standards.
17. I am not satisfied even when I know I have done my best.

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